***Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_***

CW#86: Congruencies!

Find Missing Sides & Angles

Geometry

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| **Reflection**: What does it mean for two shapes to be congruent? | |
| **Example 1:** EGI and QMO are congruent | List corresponding angles:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_   List corresponding sides:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| **You Try!** TRV and YXZ are congruent | List corresponding angles:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_   List corresponding sides:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Mark the angles and sides of each pair of triangles to indicate they are congruent.     List corresponding angles:   1. \_\_\_\_\_\_\_\_\_\_\_\_\_ 2. \_\_\_\_\_\_\_\_\_\_\_\_\_ 3. \_\_\_\_\_\_\_\_\_\_\_\_\_ | 1. If ∆ABD ≅ ∆ EBC which of the following statements are true?   D  B  A  C  E   1. AB ≅ BC c. BE ≅ BC 2. AB ≅ DB d. CE ≅ DA   e. DC ≅ AE |
| **3):** Given the figure below list all congruent angles?  G  C  B  D  E  F  A  **Why?**    **<**  ≅ **<**  *.* | |

**“Simon Says” Angles Up!**

**“Linear” -**  Arms straight out

**“Right” -** Make an L (right arm to your ears, left arm out)

**“Vertical” –** Make an X (Arms in a V- shape, legs shoulder with apart)

\*\*If “**Right”** is said twice in a row, switch your L. (Left arm to your ears, right arm out)

\*\*If “**Vertical”** is said twice in a row, make a horizontal X ( Arms in a V-shape, legs ***arms with apart****)*

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| --- | --- |
| **Ex. 1)** In the figure below, all line segments intersect at point G. and . What is ?    G | **Ex. 2)** In the figure below, lines *a* and *b* are parallel, and 9 = 130. Find 1. |
| **3)** In the figure below lines *a* and *b* are parallel, and 2 = 145. Find the measure of 11.     1. 35 2. 55 3. 145 4. Cannot be concluded from given information | 1. Lines a and b are parallel. and . What is the value of *x*? |
| **5)** Name the angle relationship | **6)** Name the angle relationship |
| **7)** Find x. | **8)** Find the exterior angle. |
| **9)** Find x. | **10)** Find the exterior angle. |
| **11)** Find the sum of the **marked** angles. | **12)** |
| **13) GROUP CHALLENGE!!** | **14)** |
| **15) Brain Teaser:**  How many triangles are in the figure below? | |